Hazardous Materials Emergency Response Plan

Cambridge Watershed

Submitted to:
Cambridge Water Department

Prepared by:
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Emergency Contact List

Cambridge Water Department

Cambridge Water Department ..... (617) 349-4770

Fire Departments

Cambridge Fire Department..... (617) 349-4900

Lexington Fire Department ..... (781) 862-0270

Lincoln Fire Department ..... (781) 259-8113

Waltham Fire Department..... (781) 893-4100

Weston Fire Department ..... (781) 893-2323

Other State and Federal Agencies

State Police..... (508) 820-2121

Department of Environmental Protection ..... (617) 556-1133
(Spill Reporting Hotlines)..... OR (888) 304-1133

Massachusetts Emergency Management Agency ..... (508) 820-2000

National Response Center ..... (800) 424-8802

Massachusetts Highway Department (District 4)..... (781) 641-8300

Emergency Contact List Details

Cambridge Water Department

Cambridge Water Department ..... (617) 349-4770
250 Fresh Pond Parkway
Cambridge, MA 02138
Chip Norton, Watershed Manager ..... (617) 349-4781

Fire Departments

Cambridge Fire Department..... (617) 349-4900
Chief Kevin Fitzgerald
491 Broadway
Cambridge, MA 02139

Lexington Fire Department ..... (781) 862-0270
Chief John Quinlan
45 Bedford St.
Lexington, MA 02420

Lincoln Fire Department ..... (781) 259-8113
Deputy Chief Richard Goddard
169 Lincoln Rd.
Lincoln, MA 01773

Waltham Fire Department..... (781) 893-4100
Chief Thomas Keough
161 Lexington St.
Waltham, MA 02452

Weston Fire Department ..... (781) 893-2323
Chief John Thorbourn
394 Boston Post Road
Weston, MA 02493

Metrofire Control Center.....Activation requested by local fire
..... department dispatch center.

Other State and Federal Agencies

State Police..... (508) 820-2121
470 Worcester Rd.
Framingham, MA 01702

Department of Environmental Protection ..... (617) 556-1133
or..... (888) 304-1133
1 Winter St.
Boston, MA 02108

Massachusetts Emergency Management Agency ..... (508) 820-2000
400 Worcester Rd.
Framingham, MA 01702

National Response Center ..... (800) 424-8802
c/o United States Coast Guard (G-OPF)
2100 2nd Street SW – Room 2611
Washington, DC 20593-0001

Massachusetts Highway Department (District 4)..... (781) 641-8300
District Highway Director: Stephen O'Donnell
519 Appleton Street
Arlington, MA 02174

1.0 Introduction

In the late 1800s, the City of Cambridge developed two reservoirs on tributaries of the Charles River in order to provide an adequate public water supply. At that time, the land area around the Stony Brook and Hobbs Brook reservoirs was rural and agricultural. Since that time, major growth in the region's transportation network and land use patterns have brought significant development and highway infrastructure to the area surrounding both reservoirs. A century after their development, Cambridge still relies on these reservoirs for virtually all of its public water supply. For these reasons, the city is now making a concerted effort to safeguard these valuable resources from potential accidents that could result in contamination of the drinking water sources. Furthermore, since the reservoirs are located outside the City of Cambridge, there is a need to involve the four communities in the watershed - Lexington, Lincoln, Waltham, and Weston - as well as several key state agencies.

This plan documents the water supply resources that must be protected, the threats to these resources, and the measures being taken to increase the preparedness of Cambridge and the watershed communities to respond to an emergency and protect the water supply from a release or spill of hazardous materials. In addition, the plan describes the emergency response resources available to the communities, provides emergency response procedures, provides emergency contact names and phone numbers, and suggests plan update procedures.

This plan has been prepared for use as:

- an immediate guide during hazardous material emergencies
- a tool for use in preparing for, and preventing, hazardous material emergencies in the Cambridge Watershed
- a document for familiarizing local emergency response personnel (i.e., fire, police and state emergency response teams) with the established emergency response procedures.

1.1 Plan Development

In 1988, the City of Cambridge and the Massachusetts Water Resources Authority commissioned the Metropolitan Area Planning Council (MAPC) to develop a comprehensive Watershed Protection Plan for the

Cambridge water supply. This study focused on the watershed of the system's two source reservoirs, Stony Brook and Hobbs Brook reservoirs. With the cooperation of an advisory committee made up of municipal representatives from Cambridge and the four communities in the watershed, MAPC published the *Cambridge Watershed Protection Plan* in 1989. The plan examined the entire spectrum of potential threats to water quality in the watershed. One of the most significant findings was the need to reduce the risk of hazardous material releases from the highway system and adjacent industrial facilities.

Following the release of the watershed protection plan, the City of Cambridge began several initiatives aimed at improving the emergency response capability in the watershed. These included the purchase of special emergency response equipment, a trailer to house and transport it, arrangements for the training of Fire Department personnel in the use of the emergency response equipment, and the production of a map atlas that details the storm drains leading to the two reservoirs. All of these are described in this plan.

The final step of the emergency response improvement program is the preparation and publication of this *Hazardous Materials Emergency Response Plan.* This plan outlines specific response procedures in order to minimize a hazardous material spill's impact to the Stony Brook and Hobbs Brook reservoirs, and their connecting waterways.

1.2 Regulatory Background

The Safe Drinking Water Act (SDWA) and Massachusetts Drinking Water Regulations require that public drinking water supplies meet specific standards to provide safe drinking water. As such, the Cambridge Water Department has a vested interest in safeguarding the watershed from hazardous material releases, and must work to provide an adequate level of protection in the watershed to minimize the risk of contamination.

Emergency releases within the watershed are regulated by the federal Emergency Planning and Community Right-to-Know Act (EPCRA), also known as Title III of the Superfund Amendments and Reauthorization Act (SARA Title III). One of the goals of this regulation is to prepare communities for emergencies. Under EPCRA, all states are required to have a State Emergency Response Commission (SERC), which is responsible for appointing Local Emergency Planning Committees (LEPCs) throughout the state. The LEPCs are responsible for preparing emergency response plans (ERPs). In some cases, the function of the LEPC has been passed on to the local fire department, who is responsible

for responding to hazardous material releases at the local level. Additional assistance is available through the Massachusetts Department of Environmental Protection (DEP).

The Waltham LEPC is responsible for developing a plan for response to hazardous material emergencies that may impact the portions of the Cambridge Watershed within Waltham. The Waltham Fire Department is the primary response agency for any potential threats to the Cambridge Watershed. A portion of this Hazardous Materials Response Plan has been incorporated into the Waltham LEPC Emergency Plan.

1.3 Role of the Communities and State Agencies

The City of Cambridge; the four watershed communities of Lexington, Lincoln, Waltham, and Weston; and several state agencies share in the responsibility for protecting Cambridge's reservoirs and responding to an emergency release of hazardous materials in the watershed. The roles of communities and agencies are briefly described below. A more detailed description of their resources, procedures, and responsibilities is presented in Section 3.0.

1.3.1 Cambridge

The City of Cambridge has assumed the overall responsibility for developing its Emergency Response Plan and coordinating its implementation. As the owner and manager of the Stony Brook and Hobbs Brook reservoirs, the Cambridge Water Department (CWD) is conducting this effort on behalf of the city. The CWD has dedicated significant funding and staff time to the development of an emergency response system, including the purchase of equipment, the training of local fire department personnel, and the production of a detailed map atlas.

Cambridge has entered into an agreement with the City of Waltham to allow for the emergency response equipment to be stored at the Waltham Fire Department. Cambridge has provided emergency response training to Waltham firefighters in conjunction with the Massachusetts Firefighters Academy and Clean Harbors.

1.3.2 Watershed Communities

The watershed of the Cambridge reservoirs lies within four communities: Lexington, Lincoln, Waltham, and Weston. The fire departments within these communities are responsible for responding to an emergency within

their portion of the watershed. However, communities may be limited in their ability to respond to a release of hazardous materials due to limited availability of specialized equipment and training. The emergency response equipment and training provided by the City of Cambridge is intended to augment the local response capabilities within the watershed. The available resources of the watershed communities are described in Section 3.0.

1.3.3 State Agencies

Several state agencies have capabilities to assist local fire departments in responding to a hazardous materials release in the watershed.

- **The Department of Environmental Protection (DEP)** is responsible for the Massachusetts Contingency Plan (MCP). DEP requires responsible parties to clean up any release of hazardous materials, or will call in a clean up contractor if the responsible party does not respond or is unknown. However, DEP is not equipped to provide immediate first response for a hazardous materials release.

- **The Massachusetts Highway Department (MHD)** has a maintenance facility at the junction of Route 128 and Route 2A in Lexington. The facility has several trucks and heavy equipment, which may be useful in responding to a spill.

- **The State Police** can provide traffic control, communications, and logistical support during an emergency response.

- **The Massachusetts Emergency Management Agency (MEMA)** can provide communications and logistical support for an emergency response. MEMA has provided funding for emergency response training for Waltham and Lexington firefighters.

- **Metrofire** is an association of fire departments in 34 communities in the Metropolitan Boston area. Metrofire coordinates mutual aid among the member departments, operates a communications system, and maintains a foam bank.

2.0 Description of the Watershed and Threats to Water Quality

The Cambridge water supply system draws water from two source reservoirs, the Hobbs Brook Reservoir located in Waltham and Lincoln, and the Stony Brook Reservoir located in Waltham and Weston. This section further describes these reservoirs and the associated watersheds.

2.1 Reservoirs, Tributaries, and Watershed Areas

The watershed area that feeds the Hobbs Brook and Stony Brook Reservoirs covers about 24 square miles in the four watershed communities, as summarized in Table 2-1. The reservoirs and watershed area are shown on Figure 2-1.

Table 2-1 Cambridge Watershed Area by Community

Community	Watershed Area (square miles)	Percent of Total Watershed Area
Lexington	1.8	8 %
Lincoln	9.2	39 %
Waltham	3.9	16 %
Weston	8.7	37 %
TOTAL	23.6	100 %

Hobbs Brook Reservoir lies at the headwaters of the watershed; water collected in Hobbs Brook Reservoir flows 2.5 miles south in an open channel into the Stony Brook Reservoir. From Stony Brook Reservoir, water is diverted through an underground pipeline 7.7 miles to Fresh Pond in Cambridge. At Fresh Pond, the water is treated and pumped to the elevated Payson Park Reservoir in Belmont. From there, water flows by gravity into the city's water distribution system. The Cambridge Water Department supplies the city with an average of 15 million gallons per day. The Massachusetts Water Resources Authority (MWRA) is available as a backup source, but the city limits the use of MWRA water for emergencies.

The Hobbs Brook and Stony Brook reservoirs provide over 2.6 billion gallons of combined storage. Stony Brook Reservoir, built in 1887, stores 339 million gallons at a maximum elevation of 80 feet above sea level, with a usable storage area between 61 to 80 feet above sea level. A dam impounds Stony Brook, a tributary of the Charles River, just above its

confluence with the Charles. Drainage from the entire 23.6 square mile watershed, including the upstream Hobbs Brook Reservoir and its watershed, flow to the Stony Brook Reservoir before being diverted to the Cambridge water system.

The Hobbs Brook Reservoir, built in 1897, is impounded by two dams, forming an upper and lower reservoir. The dams that impound Hobbs Brook, a tributary of Stony Brook, are located at Winter Street and Trapelo Road in Waltham. The reservoir stores 2.3 billion gallons, with usable storage at an elevation of 160 to 180.7 feet above sea level, as shown in Table 2-2.

Table 2-2 **Cambridge Water Supply Source Reservoirs**

Reservoir	Capacity (million gallons)	Water Area (acres)	Watershed Area (acres)	Elevation (feet)
Stony Brook	339	71	10,880	61-80
Hobbs Brook	2,296	558	4,480	160-180.7
TOTAL	2,635	629	15,360	

The two reservoirs are fed by Stony Brook, Hobbs Brook, and several smaller tributaries (see Figure 2-1). Stony Brook has its headwaters near Sandy Pond in Lincoln, and flows southeasterly through Lincoln and Weston to its confluence with the Charles River on the Weston/Waltham border. Hobbs Brook rises in wetland areas in northern Lincoln and Lexington, joining Stony Brook in Weston about one mile above the Stony Brook Reservoir. The southern portion of the watershed in Weston is drained by Cherry Brook, which joins Stony Brook about two miles prior to its confluence with the Stony Brook Reservoir. **Pollutants entering any of these tributaries will eventually reach one of the two reservoirs if the material is not contained.**

2.2 The Highway Network and Potential Impacts on the Reservoirs

State and local highways have the potential for direct impacts on the water supply because several sections of the roadways drain directly into both reservoirs. Even those roadways that do not drain directly into the reservoirs may drain to tributaries or wetlands that ultimately flow to the reservoirs.

There are approximately 100 lane-miles of state highways in the watershed, about 20 miles of which drain directly into the reservoirs

through stormwater discharge pipes (see Table 2-3). In the case of the Stony Brook Reservoir, about eight lane-miles of Route 128 straddle the reservoir, and 14 stormwater discharge pipes drain directly to the reservoir. In one section, Route 128 was built directly over Stony Brook Reservoir, bisecting it into two sections that are connected through culverts under the highway.

Along the Hobbs Brook Reservoir, about eight lane-miles of Route 128 in Waltham and three lane miles of Route 2 in Lexington, as well as the Route 2 and 128 interchange ramps, drain to the reservoir. In this area, there are about 25 stormwater discharge pipes on Route 128 and 12 discharge pipes on Route 2 that drain directly to the reservoir.

In addition, sections of Route 20 in Weston drain to tributaries of Stony Brook Reservoir, and sections of Route 2A in Lexington drain to tributaries of Hobbs Brook Reservoir.

Table 2-3 **Direct Drainage of State and Local Highways to Reservoirs**

Reservoir	State Highway Lane-Miles	State Highway Discharges	Local Roadway Discharges
Stony Brook	8	20	4
Hobbs Brook	12	37	12
TOTAL	20	57	16

In addition to state highways, numerous local roads traverse the watershed, several of which drain directly to Hobbs Brook Reservoir. These include Winter Street, Trapelo Road, and Old County Road, all in Waltham. All of the residential streets within the Bonnie Brea neighborhood in Waltham also drain into the Hobbs Brook Reservoir.

The City of Cambridge and the Massachusetts Highway Department have prepared a detailed map atlas that plots the exact location of each discharge pipe and depicts the connections between the stormwater collection system along the state highways and each of the discharges.

The stormwater catch basins that discharge to the reservoirs from state and local roads are the highest priority areas for emergency response. This is due to the potential for direct discharge of hazardous materials into the reservoirs.

Highway accidents present a significant threat to the watershed, as every accident represents a potential hazardous materials release. The greatest threat to the watershed is the possibility of an accident involving a truck

transporting bulk shipments of hazardous materials. Numerous hazardous materials are transported over highways that pass through the watershed. These include, but are not limited to, corrosive, toxic, flammable, and reactive materials.

The following two tables present accident statistics within the watershed. Table 2-4 details the number of accidents at key intersections from 1990 to 1992, while Table 2-5 outlines the number of times that the Waltham Fire Department was called to respond to an accident along Route 128 between January 1, 1998 and December 8, 1999.

Table 2-4 Reported Accidents at Key Intersections in the Watershed, 1990-1992

Community	Location	Number of Accidents
Lexington	Rt. 128 at Rt. 2	72
	Rt. 128 at Rt. 2A	43
	Rt. 2A at Old Mass Ave.	33
Lincoln	Rt. 2 at Bedford Rd.	42
Waltham	Rt. 128 at Rt. 20	79
	Rt. 128 at Winter St.	34
	Rt. 128 at Trapelo Rd.	33
	Smith St. at Trapelo Rd.	26
	Main St. at Bear Hill Rd.	37
TOTAL		399

Table 2-5 Waltham Fire Department Response to Accidents along Rt. 128, 1998-1999

Accident	Number of Responses
Vehicle Fire	30
Other Vehicle Accident	24

2.3 Other Potential Contamination Sources

The threat to reservoirs posed by highway accidents is significant, but not the only source of potential contamination. Industrial operations and other modes of transportation also present the threat of a chemical release that could reach the reservoirs.

Industrial Sources

In addition to potential discharges from accidents on state highways, hazardous material releases may occur in commercial and industrial facilities in the watershed. There are about 220 acres of commercial

development and 490 acres of industrial development in the watershed, the majority of which is in the City of Waltham (see Table 2-6).

Table 2-6 Commercial and Industrial Land in the Cambridge Watershed

Community	Commercial (acres)	Industrial (acres)	Total (acres)
Lexington	74	0	74
Lincoln	14	0	14
Waltham	125	486	611
Weston	7	4	11
TOTAL	220	490	710

In 1997, there were 68 companies in the watershed that were registered with the DEP as hazardous waste generators under the Resource Conservation and Recovery Act (RCRA). These are summarized by city in Table 2-7.

Table 2-7 Hazardous Waste Generators in the Cambridge Watershed

Community	Very Small Quantity (<99 kg/month)	Small Quantity (100-999 kg/m)	Large Quantity (1000+ kg/m)	Total
Lexington	1	11	3	15
Lincoln	0	2	0	2
Waltham	1	36	11	48
Weston	0	3	0	3
TOTAL	2	52	14	68

Hazardous waste generators range from gasoline stations and auto body shops to large industrial facilities. The majority of the hazardous waste generators in the watershed are located in the Route 128 corridor in Waltham and Lexington. The wastes include oils, solvents, cyanide, mercury, chromium, lead, and byproducts of electroplating operations.

Railroads

Two rail lines pass through the Cambridge Reservoir Watershed. One rail line, which passes from east to west across the southern portion of the watershed, is inactive. The second rail line, which runs from the northwest to southeast, is highlighted on Figure 2-1. This is an active rail line that passes directly over Stony Brook about 100 yards from where it joins Hobbs Brook.

An accident involving a train would pose a significant hazard to the watershed. A release involving fuel from the diesel engines, or hazardous freight, could impact water quality.

Fires

While a fire is not likely to have a direct impact on the reservoirs, activities involved in extinguishing a fire may. Fires that involve petroleum or other hazardous materials are commonly extinguished with the use of foam products. The foam may contain hazardous materials. Persons responding to this type of incident should treat the foam as a released hazardous material, and to the extent possible, prevent the foam from reaching the reservoir and its tributaries.

3.0 Emergency Response Agencies

In the event of a hazardous materials release, local fire departments in the watershed communities of Lexington, Lincoln, Waltham, and Weston would be called upon to respond in their respective portions of the watershed. Additional assistance could be provided by the City of Cambridge, the Metrofire Hazmat Team, a spill response contractor, and/or the Massachusetts DEP. Existing resources in each of these units are summarized below.

3.1 Waltham Fire Department

The fire department provides Waltham's emergency response capabilities with the assistance of the LEPC. The Waltham LEPC has developed an Emergency Response Plan in cooperation with the fire department and representatives of local industries. Portions of this plan have been incorporated into the LEPC manual to provide procedures specific to the protection of the reservoirs.

The fire department is equipped with an emergency response trailer stocked with spill control equipment. This trailer is described in more detail in Section 5.1. The department is also outfitted with three boats; an inflatable 10-foot boat at the main fire station on Lexington Street, an inflatable boat at the Moody Street station, and an aluminum boat at Engine No. 7 on Lake Street. Waltham has entered into an agreement with the City of Cambridge to allow for emergency response equipment to be based at the Waltham Fire Stations.

Other equipment maintained by Waltham includes a lighting truck and an air supply unit, which are based at the Waltham Emergency Management headquarters on Lexington Street.

In a chemical emergency, the city would call on the Metrofire Hazmat Team, which has an emergency response vehicle based in Somerville. The Waltham Fire Department has also made arrangements with three professional emergency response contractors that can be called on to conduct a spill cleanup.

3.2 Lexington Fire Department

The Lexington Fire Department's Operations Manual includes a procedure for hazardous materials emergencies. An Incident Command System,

where response is under the control of the Shift Commander, is established by this procedure. The operations manual does not include specific response procedures for the protection of the reservoir.

The town can handle minor spills but a major incident would require outside assistance, such as Metrofire or a professional emergency response contractor. The town has a Chemical Advisory Team that can give advice on how to manage various chemicals that have been released.

Available equipment includes 100 to 120 feet of oil sorbent booms, 100 oil absorbent sheets, 10 oil absorbent pillows, 250 pounds of Speedi Dry sorbent, 500 pounds of sodium bicarbonate, one dome cover clamp, several salvage and storage drums, and one decontamination kit. The department also has a small boat, as well as a small trailer to store and transport emergency response equipment.

If a spill were to occur in the Lexington area of the watershed, containment of the spill would be attempted by fire department personnel. If it is determined that the cleanup requires outside assistance, the fire department will rely on the DEP to coordinate a response contractor. The Lexington Fire Department has no contracts with any private spill contractor.

3.3 Lincoln Fire Department

In the event of a hazardous materials incident, containment of the spill would be attempted and the Fire Department would immediately call for outside resources. If available, Hanscom Air Field Fire Department could respond to the incident as a backup. If it is determined that the cleanup requires outside assistance, the Fire Department will rely on the DEP to coordinate a response contractor. The town has no agreements with any private spill contractors. Available equipment includes about 100 feet of oil sorbent booms and 10 forty-pound bags of Speedi Dry.

3.4 Weston Fire Department

The Town of Weston has limited equipment for emergency response. The fire department stocks a limited amount of “pigs” (sorbents) and some Speedi Dry. There is a rail line in Weston that passes through the watershed (the MBTA Commuter Rail - Fitchburg Line). Note that many parts of the railroad right-of-way are not easily accessible.

If a spill were to occur in the Weston area of the watershed, Weston firefighters would use available resources to attempt to contain the spill. The Weston Fire Department does not have any agreements with spill response contractors. The town relies on the DEP and/or the Metrofire Hazmat Team, who in turn will coordinate the cleanup with the DEP, for a hazardous material spill.

3.5 Cambridge Fire Department

The Cambridge Fire Department has a Hazardous Materials Task Force capable of responding to a hazardous material release. The task force could respond to an emergency in the watershed if requested by the local incident commander, but there is no formal mutual aid agreement or other formal arrangement for getting Cambridge involved in responding to a watershed emergency.

3.6 Cambridge Water Department

The Cambridge Water Department (CWD) should be notified any time there is a hazardous materials release or threat of a release to the reservoir and/or its tributaries. The role of the CWD is to assess the situation to determine if the release could impact the water supply. The CWD will perform down stream/reservoir investigations after conferring with the Incident Commander. This would include visual observations, photography and/or water sample collecting. During an event, the CWD will be on stand-by to answer any questions or give assistance to the Incident Commander as requested.

CWD staff will be trained, at a minimum, to the First Responder Awareness Level in accordance with OSHA's HAZWOPER standard. CWD field staff will be trained to the First Responder Operations Level. The staff is trained to deploy booms and pads in streams as an immediate defensive measure to prevent further down stream movement of material. Staff will only be trained to deploy equipment from land; they will not be able to deploy equipment on the water (i.e. from a boat). Staff can also be called upon to deliver response supplies stored in one of the three gatehouses, if requested by the Incident Commander.

In accordance with the Memorandum of Understanding with the City of Waltham, the CWD will annually inventory the equipment in the two trailers and assist Waltham with any repairs or replacements of equipment.

The CWD is be responsible for making corrections to the MassHighway Response Atlas, copying them, and distributing them every three to five years. The CWD will continue to participate in the Waltham LEPC.

3.7 Highway/Roadway Maintenance Departments

MassHighway: MassHighway provides traffic management support at an incident by providing heavy equipment and traffic control devices. Equipment that may be requested from MassHighway for a hazardous material release response includes arrowboards, variable message signs, sanders, loaders, and limited amounts of absorbent materials.

MassHighway can also dispatch a Motorist Assistance Program (MAP) van to assist with the incident. Capabilities of the MAP van include medical first response; minor Hazmat containment; debris removal; disabled vehicle removal from travel lanes, roadside repairs, communication, and other motorist assistance activities.

MassHighway has prepared a couple of documents that may also provide additional information in response to a hazardous materials release. One of these documents is the Watershed Map Atlas described in Section 5.3 of this plan. A second document, entitled the Unified Response Manual for Roadway Traffic Incidents, describes terminology, procedures, roles, duties, and responsibilities during all types of roadway incidents. The content of this manual has been reviewed and is consistent with this Hazardous Materials Emergency Response Plan.

Department of Public Works: In response to a hazardous materials release on a municipal roadway (e.g., Trapelo Road), the fire department may call in a local department of public works to provide some of the same types of services that MassHighway can provide. A public works department may be able to supply equipment such as arrowboards, sanders, loaders, and limited amounts of absorbent materials.

3.8 Metrofire Hazmat Team

The Metrofire Hazmat team is made up of firefighters, which are trained as hazardous material technicians, from most of the fire departments within Metrofire (greater Boston) district. These firefighters may be on duty or off duty in their communities when they are activated by Metrofire Control. The team is activated at the request of the fire department in the city where the incident has occurred. If necessary, the team is capable of using specialized mitigation equipment, initiating extensive

decontamination procedures, and conducting lengthy, multiple entry operations.

3.9 Massachusetts State Police

The primary function of the State Police during a response to a hazardous material release is traffic control. The State Police will also serve to assist injured persons, investigate the circumstances that led to the release (e.g., traffic accident), and to provide the public with assistance needed as a result of the release.

The State Police would most likely be notified of an incident through a call to 911, which is received at the State Police headquarters in Framingham. Headquarters would in turn notify the Concord barracks, which has jurisdiction over the area that includes the Cambridge Watershed. Concord would then dispatch cruisers as necessary.

In the event of a large spill that results from a traffic accident involving a bulk shipment of hazardous materials, the State Police may dispatch the Commercial Vehicle Enforcement Section (CVES). The CVES includes officers trained in hazardous materials emergency response procedures. The State Police do not carry spill control or containment equipment.

3.10 Department of Environmental Protection

Where appropriate, the DEP will require the responsible party to hire a cleanup contractor. If the responsible party does not act in a reasonable time frame, DEP may activate its own cleanup contractor. The agency has eight private firms under contract for the containment and cleanup of oil and hazardous materials. It is important to note that DEP is ***not equipped to provide immediate first response***. In some cases, the designated responder may be as far as 50 miles from the site, and it may take more than an hour to reach the scene.

When must the DEP be notified?

The DEP must be notified of an oil or hazardous material release when it exceeds the reportable quantity established in the Massachusetts Contingency Plan (MCP). A release that requires DEP notification must be reported within **two hours** of obtaining knowledge of the reportable condition.

The reportable quantity is **10 gallons** for petroleum-based materials (e.g., gasoline, diesel fuel, home heating oil). **Anytime** that an oil or hazardous material release, of any amount, reaches a surface water body (including stormwater catch basins) the release must be reported to the DEP.

In order to determine whether a release of other known or unknown materials requires reporting, contact a Licensed Site Professional (LSP).

4.0 Emergency Response Procedures

This section describes the steps that will be taken when the fire department receives notification of a hazardous material release that may threaten the Cambridge Watershed.

4.1 Notifications

The Fire Department, with the assistance of a 911 operator, will ensure that notifications have been made to the Cambridge Water Department (CWD), the State Police, and if appropriate, the DEP, the Metrofire Hazmat Team, the National Response Center (NRC), and/or MEMA.

4.2 First Response

The fire department will bring spill response equipment including the response trailer.

The local fire department will proceed to the scene. Depending on the information received prior to arriving at the scene, the fire department will arrange to have appropriate spill release containment equipment available. This may include the emergency response equipment trailer, boat, booms, etc. provided by the City of Cambridge (see Section 5.1). Should the release occur on Route 128, the fire department may elect to respond with vehicles headed in both the northbound and southbound directions to confirm the location of the incident.

4.3 Incident Commander

The Incident Commander will be responsible for overall operation of the response.

The Incident Commander, usually the senior fire officer, will be responsible for overall operation of the response. The Incident Commander may establish an incident command structure. Incident command structures are described in more detail by local fire department Emergency Response Plans, such as the plan found in the Waltham LEPC Emergency Plan.

4.4 Site Control

State Police, with assistance from MassHighway, will secure the area.

Upon arrival at the site of the release, the Incident Commander will ensure that assistance is being provided to injured persons as needed, and that steps are taken to protect the general public from exposure to the release. The State Police and/or local police, possibly with the assistance of MassHighway, will cordon off the area around the release and redirect traffic as necessary.

4.5 Identify Release Material

Identify the material using labels, placards, shipping documents, or type of container.

The Incident Commander will begin to assess the release by identifying the released material. Potential available information that can be used to identify the material includes labels, placards, shipping documents, type of container (e.g., drums, passenger vehicle), the North American Emergency Response Guidebook, CAMEO® (see Section 4.6), and discussions with the responsible party.

4.6 Assess Risk

Take into account the location of the release, and the amount of material released.

Once the released material has been identified, or it has been determined to be unidentifiable, the Incident Commander will next assess the risk that this incident poses to the public, the emergency responders, and the environment. This assessment will take into account the material spilled, the location of the release, and the amount of material released.

The Incident Commander may use several resources when considering the possible effects of the release. Cambridge Water Department (CWD) staff members will be available to assist in evaluating the risks posed to the two Cambridge reservoirs. Should CWD staff not be immediately available, the maps attached in Section 6.1 and the atlas described in Section 5.3 may also serve as resources in determining the possible impacts on the reservoir system.

An additional source that is available to the Incident Commander is the Computer-Aided Management of Emergency Operations (CAMEO®) program. This computer program is accessible through the Waltham 911 Emergency Communications Fire Dispatcher. A second version of the program is used by, and available through, the Metrofire Hazmat Team.

4.7 Evaluate Resources

The Incident Commander will call for outside assistance if needed.

The Incident Commander will evaluate if the resources on hand are sufficient to safely control the release, and if necessary, will obtain additional resources through organizations such as Metrofire's Hazmat Team, or a professional emergency response company.

NOTE: The local fire departments are not trained to respond to large spills or releases of highly hazardous chemicals, and are equipped only to respond to spills of petroleum products. If another type of hazardous material or a large amount of petroleum is released, the fire department's responsibilities include protecting the public and

contacting the proper authorities and/or contractors. The fire department will not attempt to respond to or contain a release of this type or magnitude.

4.8 Control Release

At a minimum, this would include placing dikes and/or booms around nearby storm drains, and possibly in the waterways.

If deemed safe to do so, the fire department, under the direction of the Incident Commander, may take measures to control the release of hazardous material. At a minimum, this would include placing dikes and/or booms around nearby storm drains, and possibly in the waterways. An effort will also be made to prevent or reduce the likelihood of hazardous materials reaching soil or any body of water. The Incident Commander will ensure that appropriate personal protective equipment (PPE) is selected based on the material released, and that the responders wear the PPE.

4.9 Arrange for Cleanup and Disposal

The fire department will ensure that a contractor is contacted for the final cleanup.

While the fire department is equipped to contain most releases, the Fire Department will not conduct final cleanup of the released material. An emergency response contractor will be notified of the release as soon as possible so that they will be able to mobilize their employees and respond quickly. The party responsible for the release may contact their own response company; however, if this option is not available, the fire department or the DEP will contact a response company.

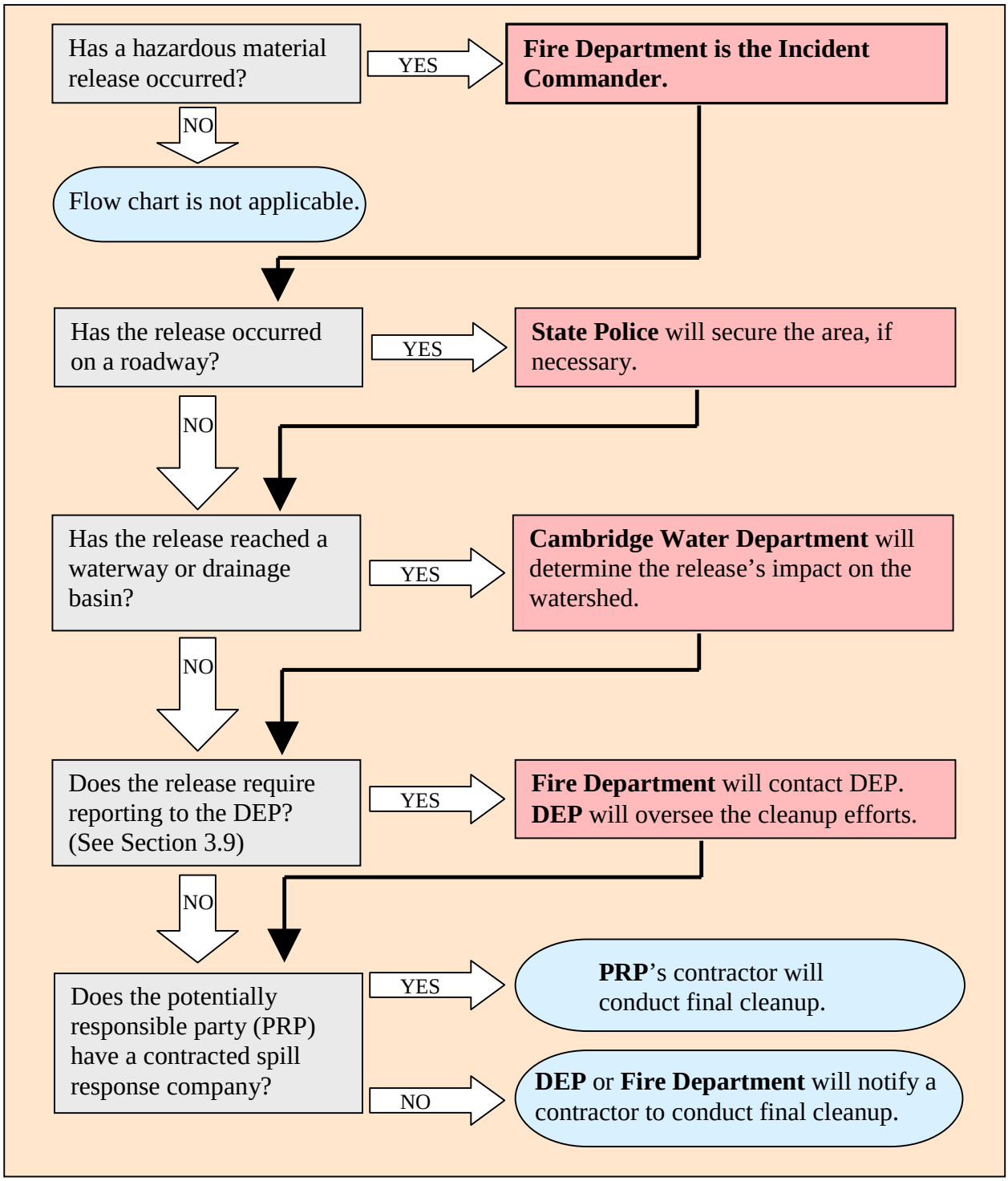
The fire department will track emergency response equipment used during the response and ensure that these materials are restocked.

4.10 Debrief

CWD will hold a meeting with response agencies to discuss the response effort.

Upon completion of each response, a meeting between the responding agencies and the CWD will be held. The meeting will cover how the response was handled and what can be improved. The result of this meeting may include updating the procedures in this manual.

Figure 4-1 Incident Command Flow Chart



5.0 Emergency Response Equipment

Emergency response equipment for responding to releases of different sizes and materials is available from several sources and in several locations throughout the watershed. The primary sources of this equipment are outlined below.

5.1 Waltham Fire Department

In order to augment the emergency response capabilities of the communities in the watershed, the City of Cambridge has purchased emergency response equipment. Through an agreement with the City of Waltham, the equipment is deployed at the central Waltham fire station on Lexington Street.

5.1.1 Agreement between Cambridge and Waltham

In May 1995, the cities of Cambridge and Waltham signed an agreement that describes the terms of the transfer of emergency equipment from Cambridge to Waltham. The equipment includes materials useful for an initial response to contain a hazardous material release (e.g., inflatable pipe plugs, catch basin covers, and containment booms). See Appendix A for a full list of emergency equipment provided to the City of Waltham. The equipment is stored in a box trailer that the Waltham Fire Department can bring to a hazardous material release within the watershed. Cambridge has also provided the Waltham Fire Department with a second trailer that carries a 12-foot inflatable boat with outboard motor, 200 feet of containment booms, and an ice rescue sled. The agreement is to be automatically renewed every year, and either city may terminate the agreement upon 30 days written notice.

5.1.2 Conditions for Use of the Equipment

The agreement specifies that the primary purpose of the equipment is for initial response to a hazardous materials release in and around the Cambridge watershed. However, the agreement also provides that Waltham may use the equipment in locations outside of the watershed.

Waltham agrees to provide the Cambridge Water Department with an annual report listing the dates any pieces of equipment were used, what pieces were used, where they were used, the circumstances necessitating the use, and whether the equipment succeeded in meeting the need. Waltham also agrees to allow Cambridge employees to inspect the

equipment at least once per year at a reasonable time to be coordinated with the Waltham Fire Department.

5.1.3 Maintenance and Replacement of the Equipment

The agreement specifies that Waltham will store and maintain the equipment, and that Cambridge agrees to pay up to $500 per year to help pay for the maintenance of the equipment. If any of the equipment is damaged and/or destroyed, Cambridge is responsible to repair and/or replace the equipment.

5.2 Gatehouses

The Cambridge Water Department maintains three gatehouses associated with the two reservoirs. Two are associated with the Hobbs Brook Reservoir on Winter Street (Waltham) and on Trapelo Road (Lincoln), and one associated with the Stony Brook Reservoir on Gatehouse Lane (Weston). The locations of the three gatehouses are shown on Figure 5-1.

In order to have emergency response equipment available closer to the reservoirs, a limited amount of equipment has been placed in each of the gatehouses. The types and amounts of equipment at each gatehouse is listed in Appendix A. The Cambridge Water Department has provided the Waltham Fire Department with access to the gatehouses by using Knox-Boxes. A Knox-Box is a virtually indestructible box that is bolted to the building. The cover has only one key, and the fire department holds that key. Inside the box are keys that allow access to the gatehouse.

The Winter Street and Stony Brook Gatehouses are equipped with flow control valves that can be closed, thereby preventing contaminated water from passing through. Cambridge Water Department employees will be called upon to make any decisions that involve stopping water flow through one of the gatehouses.

A description of the gatehouses and directions to each are provided below. If, during an incident response, heavy traffic or other roadway conditions make travel to or from a gatehouse difficult, Cambridge Water Department employees may request a police escort.

Trapelo Road Gatehouse, Lincoln. Drainage from the northern most sub-basins and the northern section of the Hobbs Brook Reservoir passes through the Trapelo Road Gatehouse. Although the control valves at this gatehouse are not functioning, it serves as a single location through which

water, and an associated spilled material, must pass to reach the drinking water supply.

DIRECTIONS to the Trapelo Road Gatehouse: From Route 128 take the Trapelo Road exit heading west towards Lincoln. The gatehouse is located approximately 0.8 miles from Route 128 just over the Lincoln town line.

Winter Street Gatehouse, Waltham. The Winter Street Gatehouse serves as the outlet from Hobbs Brook Reservoir. A large spill that has reached this point can be contained in the Hobbs Brook Reservoir by closing the gate and stopping flow out of this reservoir until the released material is removed from the water.

DIRECTIONS to the Winter Street Gatehouse: From Route 128 take the Winter Street exit heading west. The gatehouse is located approximately one-half mile from Route 128.

Stony Brook Gatehouse, Weston. Water is diverted to the Cambridge drinking water system through the Stony Brook Gatehouse. A large release that occurs directly into the Stony Brook Reservoir, or that has reached the gatehouse from upstream waterways, can be kept from entering the drinking water system by closing the gate.

DIRECTIONS to the Stony Brook Gatehouse: *From Route 128* take the exit for Route 20 east (Weston Road). Follow Weston Road to South Street and take a right onto South Street. Follow South Street approximately two miles and take a right onto Gatehouse Lane. *From the Waltham Fire Department* take Lexington Street to Main Street. Take a right onto Main Street. After approximately three-quarters of a mile take a left onto Weston Road. Take an immediate left onto South Street. Follow South Street approximately two miles and take a right onto Gatehouse Lane.

5.3 Watershed Map Atlas

As part of its study of roadway drainage in the watershed, the Massachusetts Highway Department developed a detailed Hazardous Materials Emergency Response Atlas pertaining to the state highways in the watershed. The atlas shows the stormwater collection and discharge system in detail, and identifies each catch basin and the location of its discharge to the reservoirs or tributaries. Copies of the atlas are available in the Waltham Fire Department Deputy Chief's car and in the emergency response trailer provided by the City of Cambridge for the Waltham Fire Department.

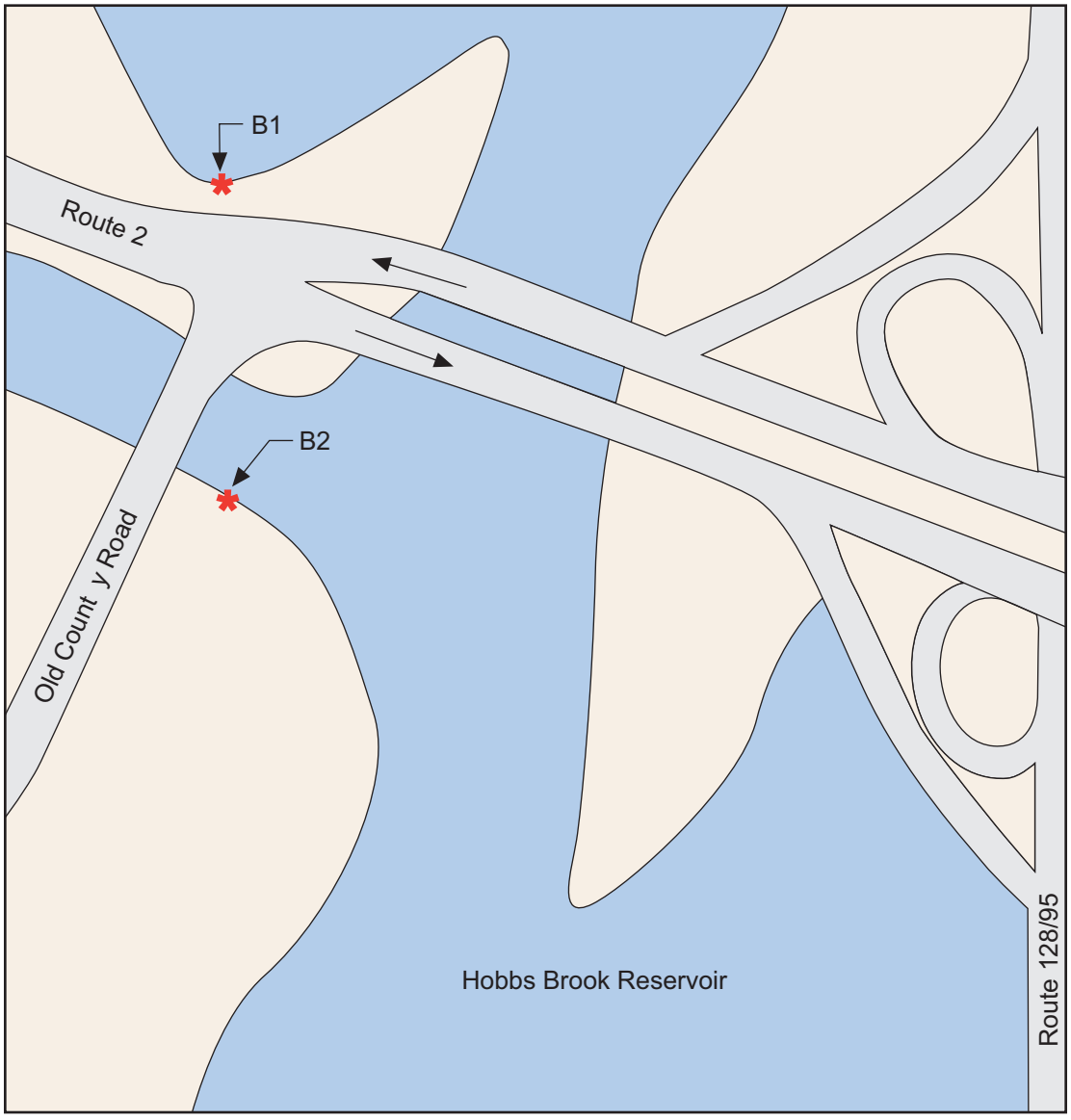
As part of their Hobbs Brook and Stony Brook Watersheds Highway Drainage Improvement Projects, The Massachusetts Highway Department has agreed to update the atlas every 3 to 5 years. The Cambridge Water Department will print and distribute the atlas.

5.4 Boat Access

There are 6 boat access points located in the reservoir system. These are shown in Figure 5-2. In the event that placing booms or other control equipment in the reservoirs can best control a hazardous material release, these locations provide a means of accessing the water.

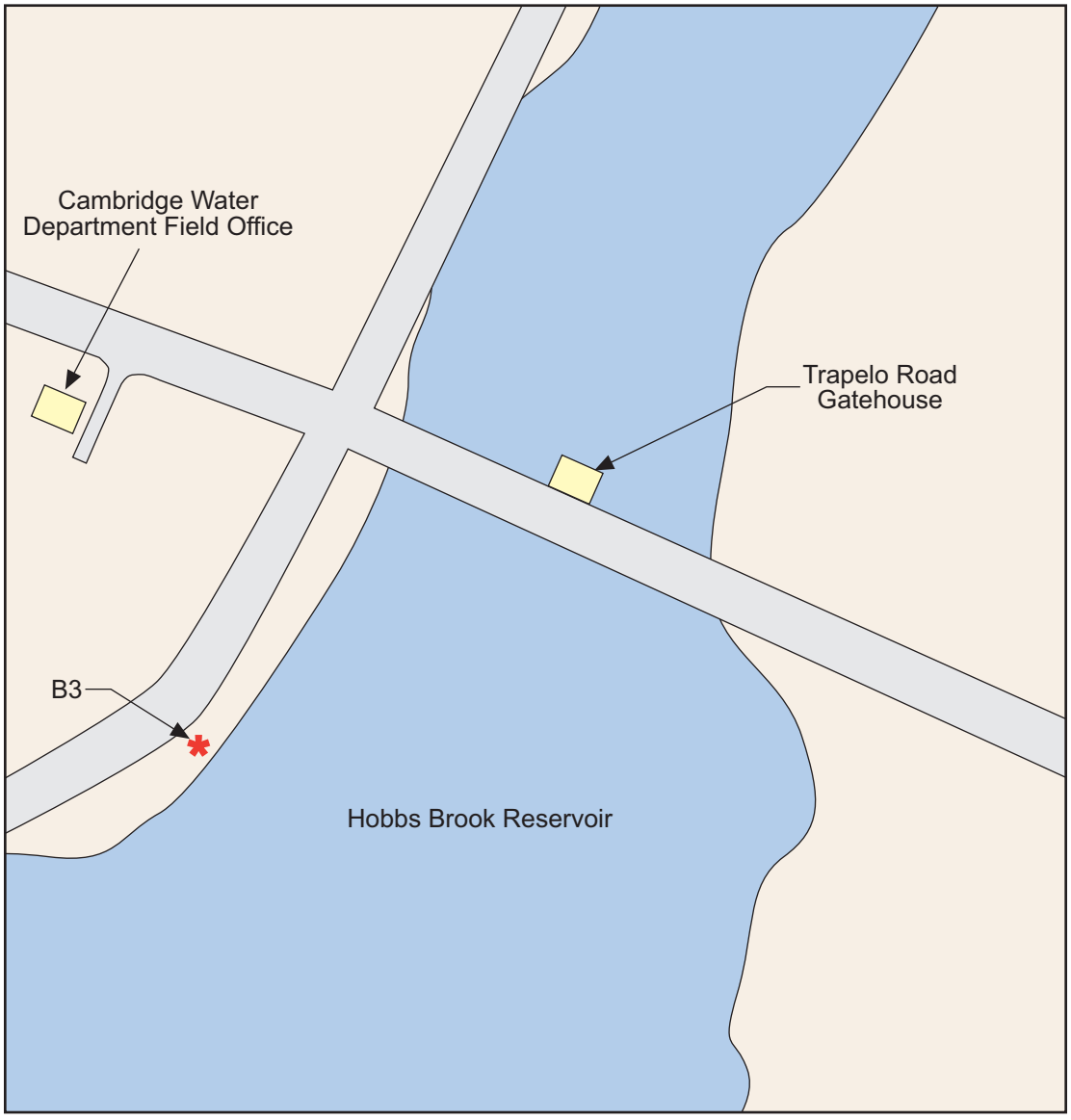
Boat Access Point B1 & B2: Route 2 West

Boat access to the northern most portion of the Hobbs Brook Reservoir is located on Route 2 westbound, a short distance west of the Route 128 interchange. A section of the Hobbs Brook Reservoir located between Route 2 and Trapelo Road is not provided with a boat access point. A possible location for the access point is marked on the map.



Boat Access Point B3: Old County Road

A path off Old County Road provides boat access to the portion of the Hobbs Brook Reservoir to the south of Trapelo Road. The path is located near the intersection of Old County Road and Trapelo Road.



Boat Access Point B4: Winter Street

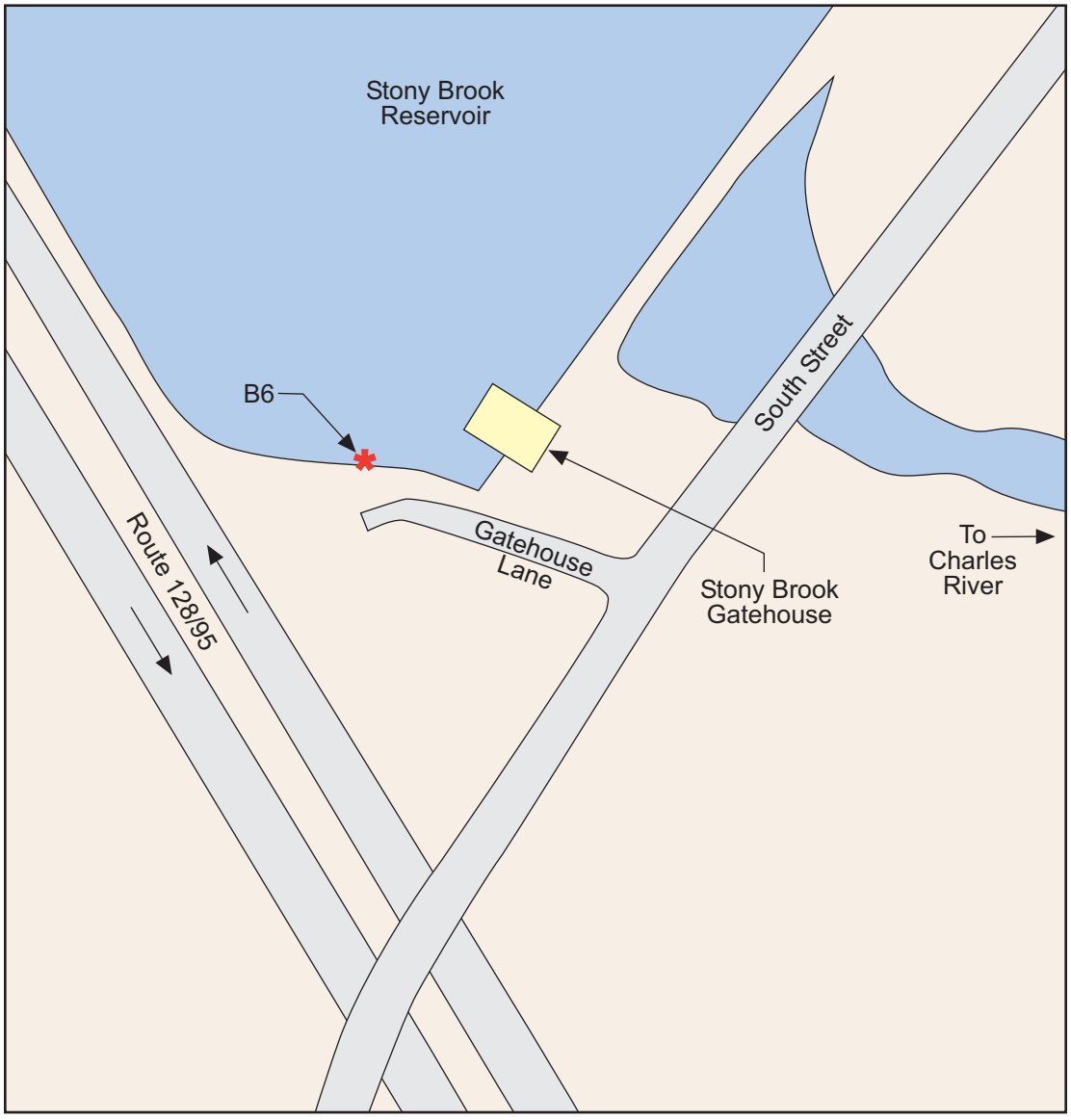
A break in the guardrail along Winter Street (east of the Winter Street Gatehouse) provides boat access to the southern most portion of the Hobbs Brook Reservoir.

Boat Access Point B5: Route 128

The northern portion of the Stony Brook Reservoir can best be accessed from a path off of Route 128 southbound. The path is located where Route 128 passes over the Stony Brook Reservoir.

Access Point B6: Stony Brook Gatehouse

Located just north of the Stony Brook Gatehouse is a boat ramp that provides the best means of access to the southern portion of the Stony Brook Reservoir. The boat ramp is accessed through the gate to the gatehouse property.



6.0 Tracking Releases

An effective response to the release of a hazardous material in the watershed requires an understanding of how a spilled material would travel through the watershed if it reaches a wetland or waterway. This section provides a general overview of the movement of water through the watershed, and also a detailed description of some of the strategic locations where a response team can access the waterways and contain the released material.

Included within this section are several maps, which can be used by response personnel to determine the path of a release within the watershed.

Figure 6-1 depicts the two basins that make up the Cambridge Watershed. Each basin has been divided into sub-basins, which are depicted on the same figure. Drainage from each of the sub-basins enters the reservoirs or major tributaries at specific locations where a release can be contained. Access to the key drainage collection locations is detailed in Section 6.3.

6.1 Key Access Points

In addition to the gatehouses, there are several locations where a hazardous material release into one of the sub-basins can be contained to prevent the spill from reaching one of the reservoirs. Each of these key access points is depicted on Figure 6-2. A spill response in these areas should include placing spill control equipment at these strategic locations to collect any material that escapes the primary containment efforts at the scene of a release. This section details the locations of these key access points via maps through which these locations can be reached.

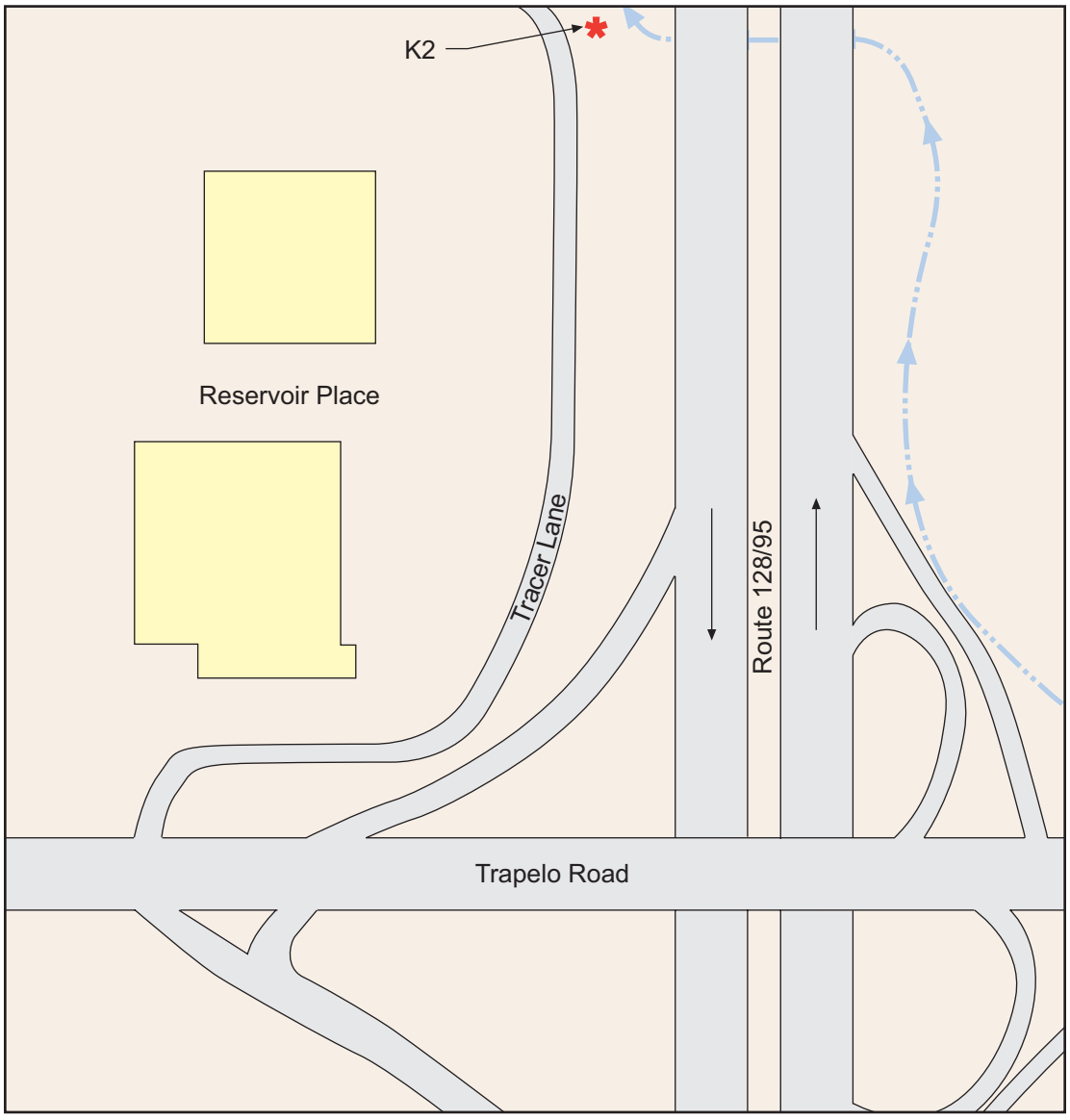
For each key access point shown on Figure 6-2, an additional sheet is attached. Each sheet contains an enlarged map to locate the area, a picture of the access point to assist in identifying the area, and a written description of the access point. The description also assists in tracking a release by suggesting the next location to inspect if the released material has already reached a certain point.

Key Access Point 1: Lincoln St. and Route 128

The access point at the intersection of Lincoln Street and Route 128 is the outfall from a culvert that runs under Lincoln Street and discharges into the Hobbs Brook Reservoir. The culvert collects drainage from subbasin labeled as "C" on Figure 6-1, which includes a section of Route 128 that contains a highly trafficked rest area. Drainage from along Lincoln Street in Lexington (part of subbasin D) also discharges at this point. **A released material that has passed through this access point could next be intercepted at the Route 2 stabilizer pipes.**

Key Access Point 2: Reservoir Place

The Reservoir Place access point collects drainage from the subbasin labeled as "E" on Figure 6-1. This point is accessed through the northeastern corner of the Reservoir Place parking lot. At this location the drainage flow emerges from a culvert underneath Route 128 and continues north in open channel flow to the Hobbs Brook Reservoir. **A released material that has passed through this access point could next be intercepted at the Trapelo Road Gatehouse or possibly in the reservoir near the Route 2 interchange.**



Key Access Point 3: Hobbs Brook Nursing Home/Trapelo Road

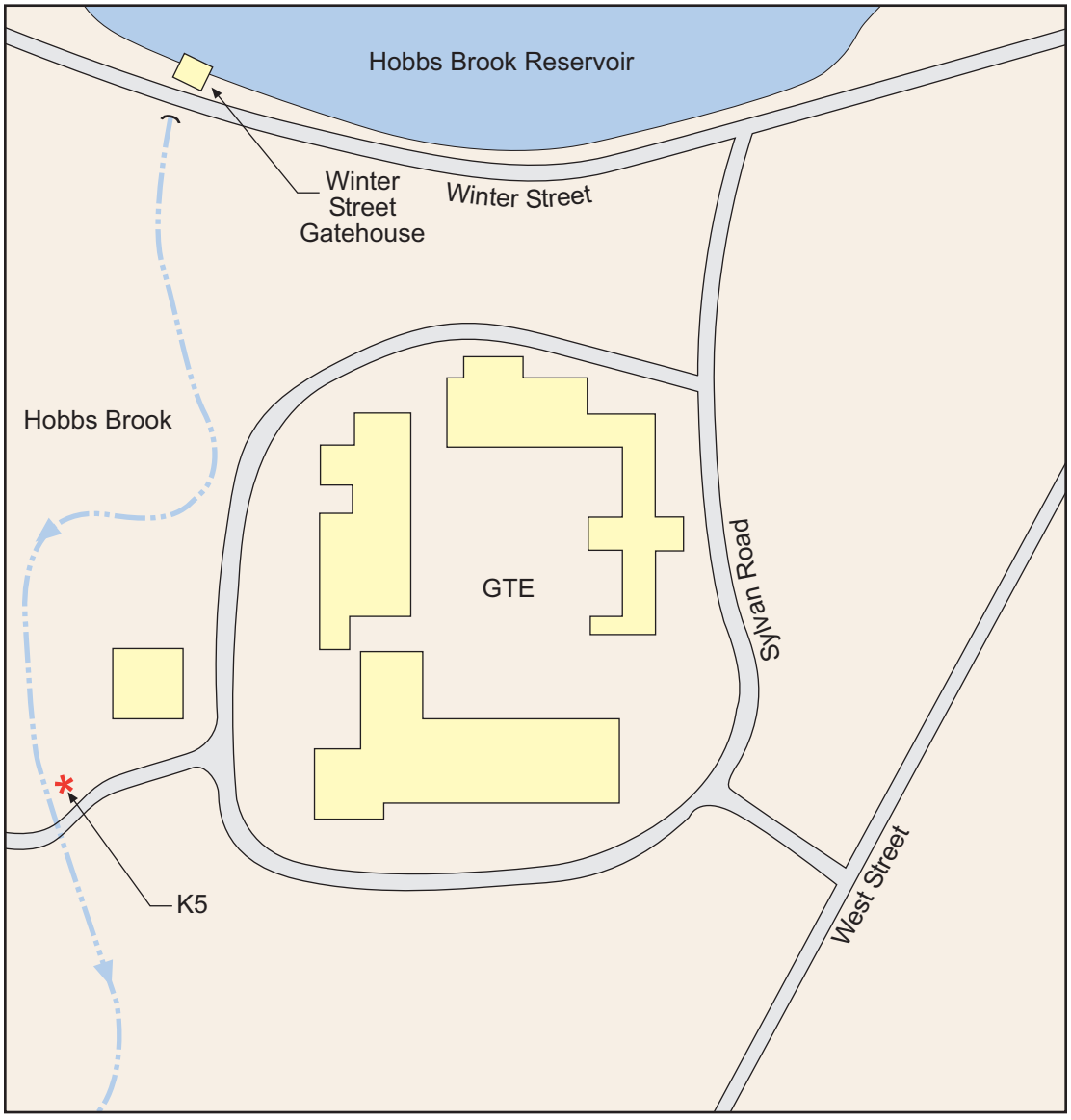
The Hobbs Brook Nursing Home access point is located on Trapelo Road across from the nursing home. Drainage to this point is collected from this section of Trapelo Road and the surrounding area. **A released material that has passed through this access point could next be intercepted at the Winter Street Gatehouse.**

Key Access Point 4: Trapelo Road at Christopher Road

The Christopher Road access point is located near the intersection of Trapelo Road and Christopher Road. Drainage to this point is collected from this section of Trapelo Road and the surrounding area. **A released material that has passed through this point could next be intercepted at the Winter Street Gatehouse.**

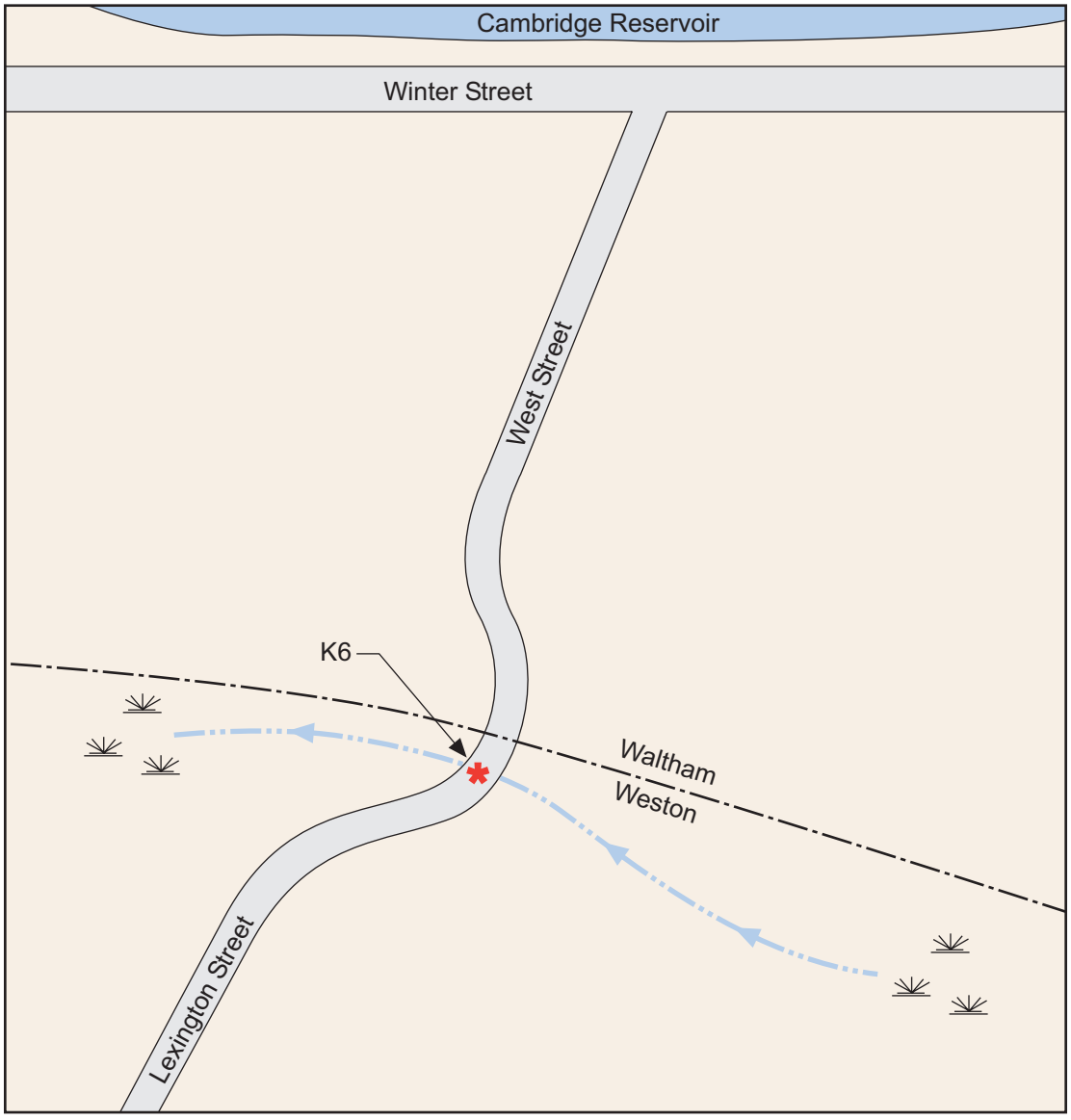
Key Access Point 5: GTE

The GTE access point provides access to Hobbs Brook, south of the Hobbs Brook Reservoir. The brook flows underneath a bridge that provides access from the GTE parking lot to Town of Weston conservation land. **A released material that has passed through this point could next be intercepted at Key Access Point K10, the Weston Transfer Station.**



Key Access Point 6: Waltham/Weston Line (Lexington Street)

The access point located at the Waltham/Weston line on Lexington Street collects drainage from the subbasin labeled as "G" on Figure 6-1. At this point the water flows underneath Lexington Street. **A released material that has passed through this point could next be intercepted at Key Access Point K10, the Weston Transfer Station.**



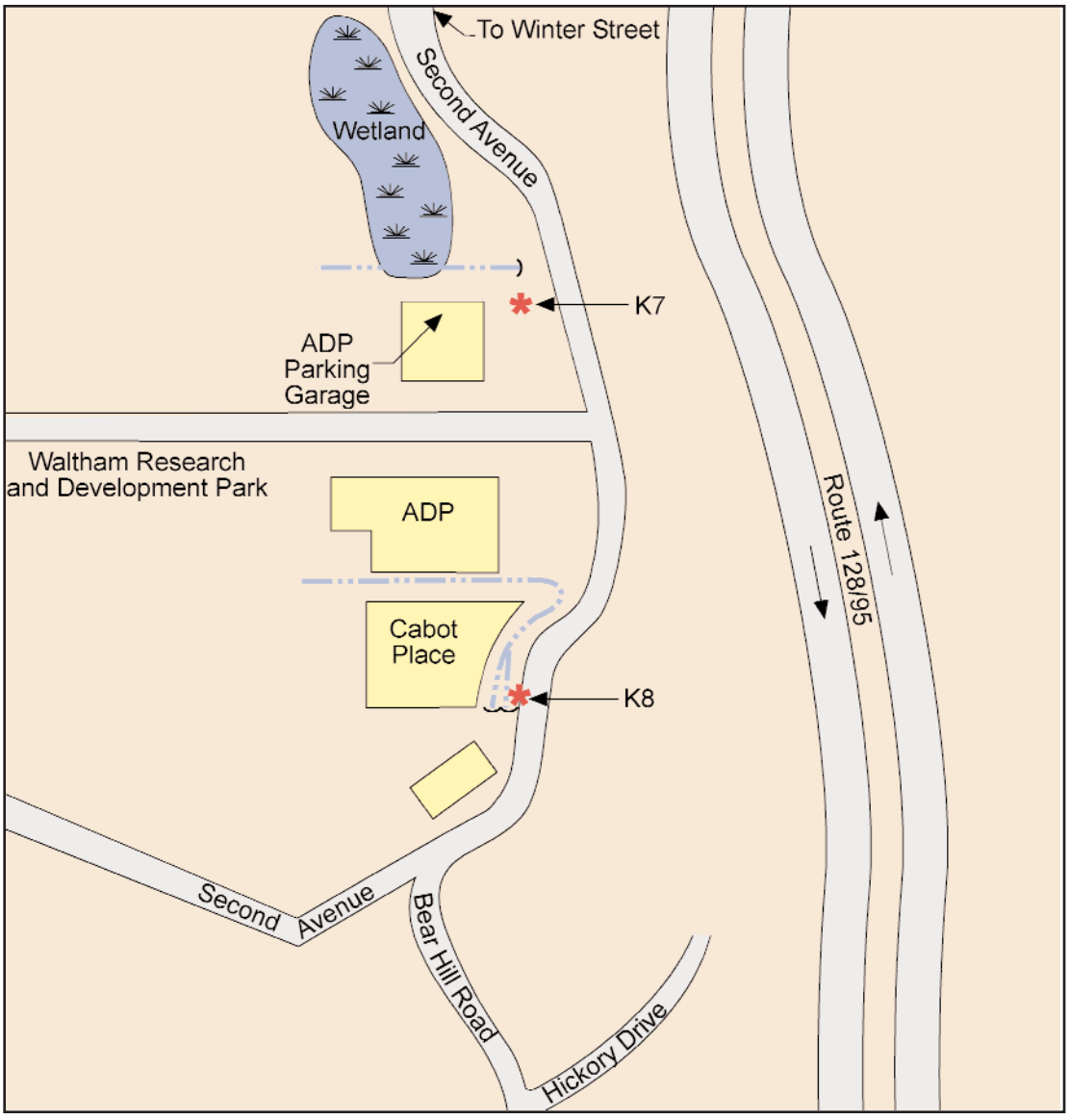
K7

K8

Key Access Points 7 & 8: Bear Hill Road

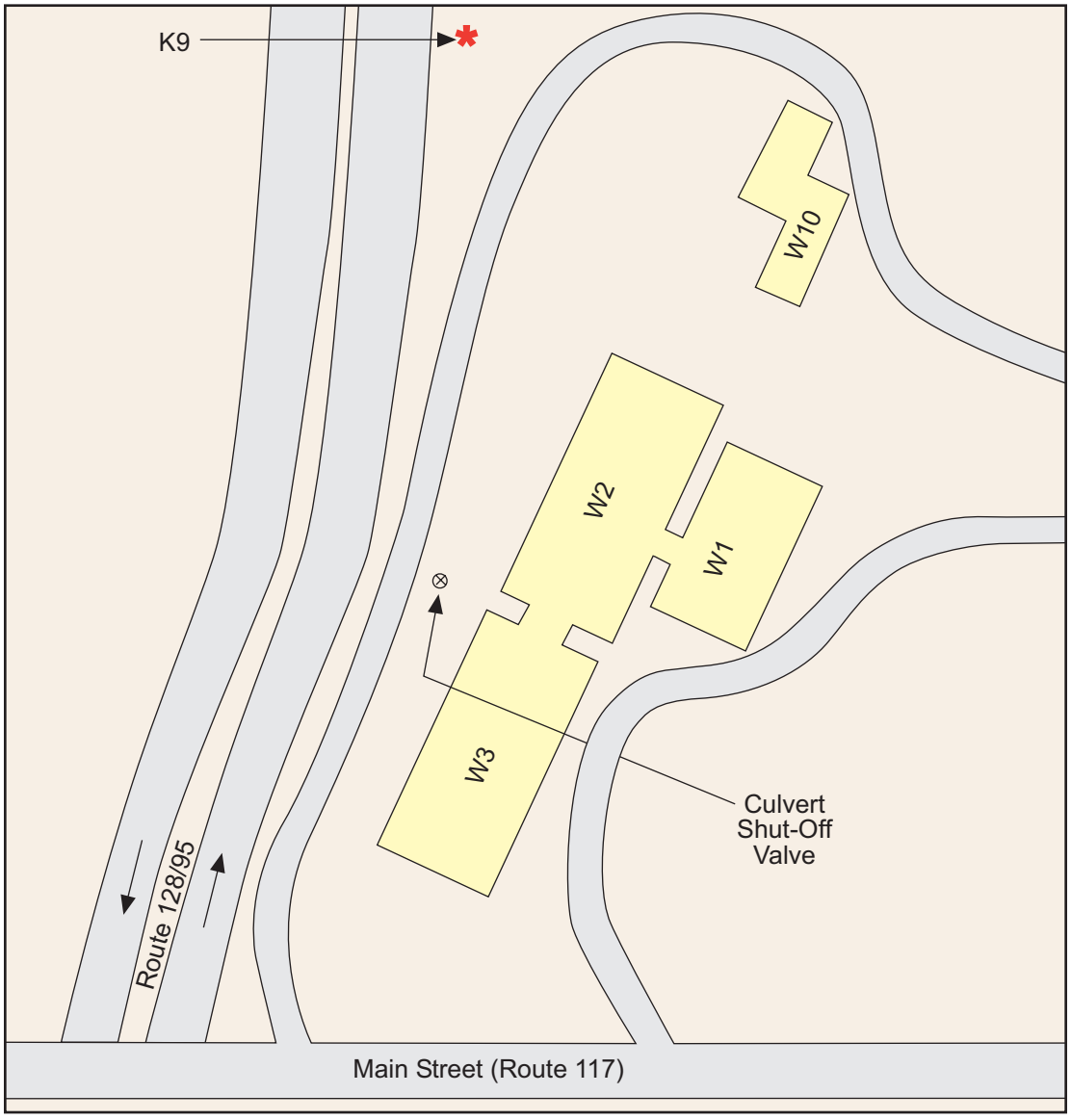
A couple of additional key access points have been identified within subbasin G. If a hazardous material release within this sub-basin can be contained upstream of the Waltham/Weston Line (key access point K6) this could greatly reduce the cleanup effort and cost. The large number of commercial and industrial establishments in this area makes it desirable to indicate these additional access points.

A released material that has passed through one of these access points could next be intercepted at Key Access Point K6, the Weston/Waltham Line.



Key Access Point 9: Polaroid

The Polaroid access point is located on the Polaroid property off of Main Street in Waltham. Drainage from the northern portion of subbasin labeled as "J" on Figure 6-1, as well as drainage from the portion of Bear Hill Road in subbasin F (via a culvert under Route 128), pass through this point. **A shutoff valve has been installed in a culvert downstream of this access point.** Polaroid personnel control this shutoff valve. Closing the shutoff valve can contain a released material that has passed through this access point. **If the released material has been transported beyond the shutoff valve, the material could next be intercepted at Key Access Point 12, the Route 20/Route 128 interchange.**



K10

K11

Key Access Points 10 & 11: Weston Transfer Station

The two access points located adjacent to the Weston Transfer Station provide access to the area where Hobbs Brook joins Stony Brook and continues towards the Stony Brook Reservoir. At this location, Stony Brook is carrying the drainage from subbasin H and Hobbs Brook is reaching its end, therefore it carries drainage from the entire Hobbs Brook Watershed, including subbasins A through G.

One access point is located underneath a railroad overpass. This point provides access to Hobbs Brook before it joins with Stony Brook. The second access point is located on a small bridge at the entrance to the Weston Transfer Station. This bridge provides access to Stony Brook before the introduction of Hobbs Brook. **A released material that has passed through one of these access points could next be intercepted at Key Access Point K13, the Route 20 and Route 128 interchange.**

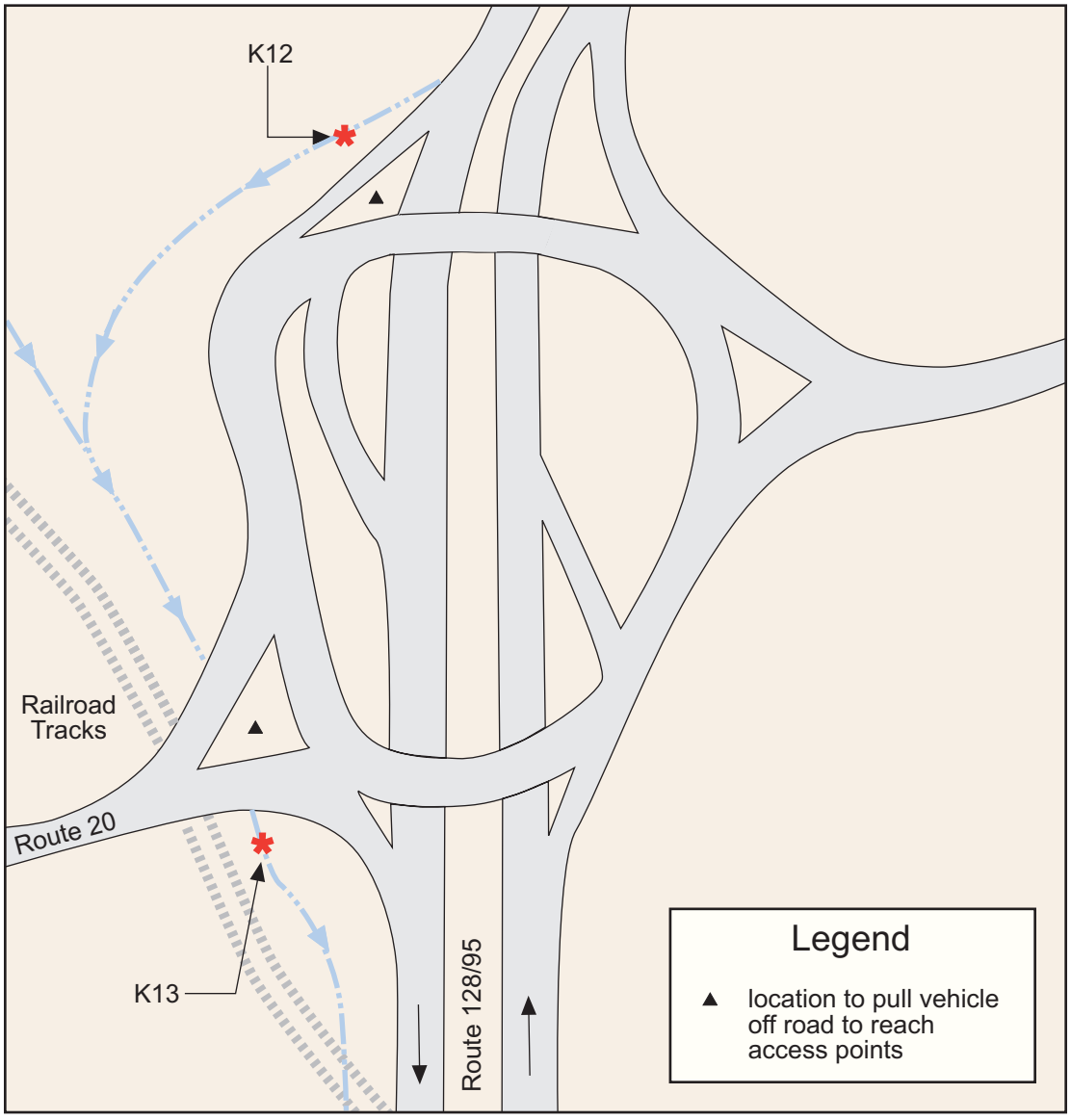
K12

K13

Key Access Points 12 & 13: Route 20 and Route 128

There are two access points located at the intersection of Routes 20 and 128. Access point K12 is an outfall that collects drainage from the subbasin labeled as "J" on Figure 6-1. Access this point from the Route 128 southbound off-ramp to Route 20, or from the Route 20 rotary. Park in the location marked on the map. **A released material that has passed through this access point could next be intercepted at Key Access Point K13.**

Access point K13 is a culvert that carries Stony Brook under Route 20. Access this point by parking in the location marked on the map, walk down the hill towards the railroad tracks, take a left under the bridge, follow the tracks for about 150 feet, and take a left down the hill towards Stony Brook. The culvert is on your left. **A released material that has passed through this access point could next be intercepted at the Stony Brook Gatehouse, or possibly at Boat Access Point B4 (Figure 5-2).**



Key Access Point 14: Route 20 at the Stony Brook Reservoir

The Route 20 access point is located at the northern tip of the Stony Brook Reservoir. This point contains two culverts. The large, 24-inch, culvert drains Route 20 and its interchange with Route 128. The smaller, 12-inch, pipe is a cross culvert from the Massachusetts Broken Stone facility. **A released material that has passed through this access point could next be intercepted at the Stony Brook Gatehouse, or possibly at Boat Access Point B4.**

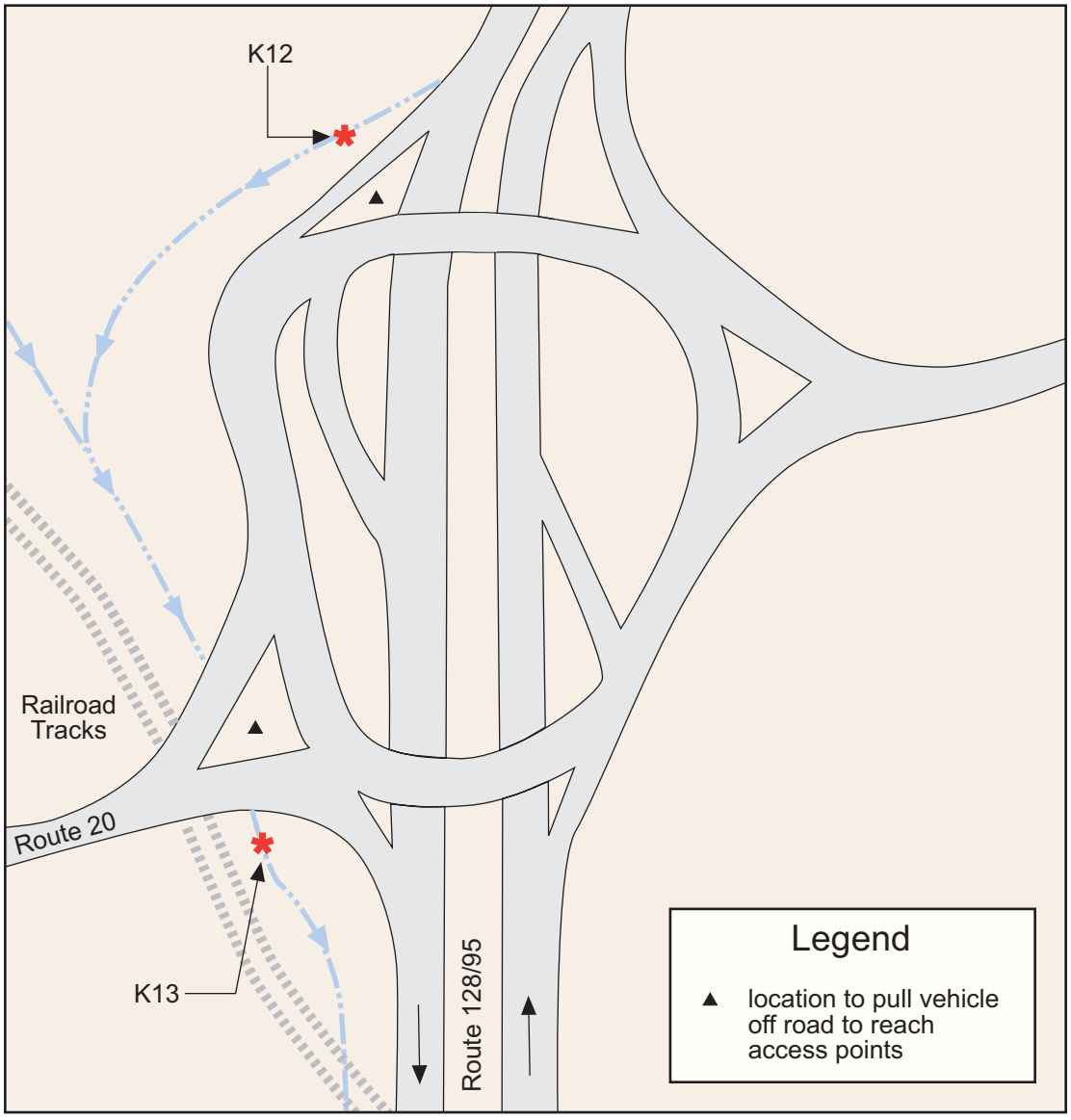
K12

K13

Key Access Points 12 & 13: Route 20 and Route 128

There are two access points located at the intersection of Routes 20 and 128. Access point K12 is an outfall that collects drainage from the subbasin labeled as "J" on Figure 6-1. Access this point from the Route 128 southbound off-ramp to Route 20, or from the Route 20 rotary. Park in the location marked on the map. **A released material that has passed through this access point could next be intercepted at Key Access Point K13.**

Access point K13 is a culvert that carries Stony Brook under Route 20. Access this point by parking in the location marked on the map, walk down the hill towards the railroad tracks, take a left under the bridge, follow the tracks for about 150 feet, and take a left down the hill towards Stony Brook. The culvert is on your left. **A released material that has passed through this access point could next be intercepted at the Stony Brook Gatehouse, or possibly at Boat Access Point B4 (Figure 5-2).**



Key Access Point 14: Route 20 at the Stony Brook Reservoir

The Route 20 access point is located at the northern tip of the Stony Brook Reservoir. This point contains two culverts. The large, 24-inch, culvert drains Route 20 and its interchange with Route 128. The smaller, 12-inch, pipe is a cross culvert from the Massachusetts Broken Stone facility. **A released material that has passed through this access point could next be intercepted at the Stony Brook Gatehouse, or possibly at Boat Access Point B4.**

7.0 Training

The City of Cambridge, working in cooperation with the Massachusetts Fire-fighting Academy, has developed an emergency response training program. The program is designed to train fire department personnel in the use of emergency response equipment and procedures to protect the watershed in the event of a hazardous materials release. The training is organized into four modules that cover emergency equipment, petroleum spill emergencies, hazardous materials response procedures, tabletop exercises, manufacturer's equipment demonstration, and simulated spill responses.

At a minimum, firefighters expected to respond to a hazardous materials release receive training equivalent to First Responder Operations Level training as described by OSHA's HAZWOPER Standard (29 CFR 1910.120). This training includes an 8-hour initial training course and annual refresher training. In addition, the Cambridge Water Department contracted a spill response company to provide boom deployment training for the Waltham Fire Department. It is not expected that firefighters will go beyond the initial containment of an emergency hazardous materials release. Further actions required by an emergency release will be taken by the Metrofire Hazmat team or by an emergency response contractor who has been trained to conduct such activities.

A training program in the form of a tabletop exercise will be conducted at least once every two years. Each of the response agencies and responsible parties mentioned in this plan will be invited to take part in the exercise. Updates to this plan may be identified during this biennial exercise, and incorporated into the plan as described in Section 8.0.

8.0 Emergency Response Plan Updates

This Emergency Response Plan must be tested, reviewed and amended as necessary on an annual basis.

The plan will also be reviewed and amended if one or more of the following occurs.

1. The plan fails to be effective during an emergency.

2. The Cambridge Water Department updates general emergency response procedures. This may result from meetings that take place after an emergency response action.

3. Emergency phone numbers or contacts change.

4. There are changes in the amount, type, or location of emergency response equipment.

5. Plan revisions are identified during the tabletop exercises described in Section 7.0.

6. Applicable regulations are revised.

The Cambridge Water Department will have responsibility for updating and/or coordinating the Emergency Response Plan amendments. Revised copies of the plan will be distributed to the watershed communities.

Appendix A

Waltham Fire Department Spill Response Equipment

Emergency Response Equipment

Provided to the Waltham Fire Department by the Cambridge Water Department

ITEM	QTY	DESCRIPTION
BOX TRAILER (Special Unit #1)		
Box Trailer	1	12’ x 7’ x 6.5’; GVRR 7000 lbs.
First Aid Cabinet	1	16” x 13” x 5”
Safety Goggles	10	Clear Plastic
Grease Wipes	6	60 / Container
Box of Grease Towels	1	300 / Box
Pelican Flash Light	1	Water Proof
Repair Putty	12	All Purpose
Metal – Square Shovel	1	All Purpose
Roll of Plastic	1	12’ x 100’ x 4 mil.
Plywood Containment Bin	1	2’ Square
Polypropylene Rope	1	½” x 100 foot
Squeegee with handle	3	PVC Plastic
Overpack Drum	1	95 Gallons
Lid-Loc Clamps	3	Dome & Hatch Clamps
Inflation Pipe Plugs Filling Hose Pressure Gauge	1 1 1	8” to 24” Non-kink 24”
Catch Basin Covers	3	36” x 36” x ½”
Drum and Tank Patch Kit	1	Assorted Patches
Belly Patch	2	1 Magnetic / 1 Suction
Containment Boom	2	50’ Section
Non-sparking tool kit	1	Aluminum / Bronze

Non-sparking Metal Shovel	2	10” x 12”
Polypropylene Shovel	2	16” x 14” x 41”
Drum Truck Non-sparking	1	1000 lb. / Non-sparking
Booms for Petroleum Products	14	8” x 10’
Pads for Petroleum Products	600	18” x 18”
Loose Packed Caterpillar Strips	1	75 lbs.
Booms for Acid/Caustic Spills	4	8” x 10’
Pads for Acid/Caustic Spills	100	Pads
Coveralls – Level C/B	10 6 10	Large Extra Large Extra, Extra Large
Boot Covers – Disposable	10 10 20	Large Extra Large Extra, Extra Large
Gloves – Neoprene, Heavy Weight	25 25	Large Extra Large
BOAT / ICE SLED TRAILER (Special Unit #2)		
Boat Utility Trailer	1	6.5’ x 14’ Single Axle
Inflatable Boat	1	Zodiac 12’-1100 lb. Capacity
Outboard Motor	1	Johnson 15 hp.
Ice Rescue Sled	1	Sled, Ice Grab Paddles, Harness, 300’ x 3/8” Polypropylene Rope
Life Jackets	5	Type 3 Industrial
Life Ring	1	30” Type IV
Containment Boom	4	50’ Sections
Grappling Hook	1	Metal 3 Prong
Mushroom Anchor	1	8 lb.

STONY BROOK GATEHOUSE		
Absorbent Pads	400	18” x 18”; for petroleum products
Absorbent Booms	3	8” x 10’; for petroleum products
Containment Boom	1	100’ section
Containment Boom	1	25’ section
WINTER STREET GATEHOUSE		
Absorbent Pads	400	18” x 18”; for petroleum products
Absorbent Booms	3	8” x 10’; for petroleum products
Containment Boom	1	100’ section
Containment Boom	1	25’ section
TRAPELO ROAD GATEHOUSE		
Absorbent Pads	400	18” x 18”; for petroleum products
Absorbent Booms	5	8” x 10’; for petroleum products
Containment Boom	1	25’ section

Appendix B

Cambridge/Waltham Memorandum of Understanding